

COVID-19 (Wuhan Coronavirus) - Coronavirus UPSC

Wuhan, the 7th-largest city in China, is the epicentre of a virus outbreak, the first few cases of which were reported in December 2019. This is an ongoing development and is also important for the **UPSC exam**, from the perspective of health and epidemic control. In this article, you can read all the latest on the COVID-19 (Wuhan Coronavirus) outbreak.

To stay updated with the latest news about Coronavirus, one can visit the Indian government official website – <https://www.mygov.in/covid-19/>. This official website hosts every relevant information regarding the Covid-19 and India's fight against it.

Wuhan Coronavirus – Introduction

- This is a new coronavirus that has been identified for the first time in the city of Wuhan, the capital of the Hubei Province in mainland China.
 - It was identified after people developed pneumonia without an evident cause and where current vaccines and treatment methods were not effective.
 - There have been around 80000 people infected with the virus in China. There have also been almost 3000 fatalities there, exceeding those from SARS.
 - Cases have also been reported outside China, in Hong Kong, South Korea, Iran, Italy, Australia, Thailand, France, Spain, Germany, the US, countries in West Asia, etc. totaling over 90 countries. India reported its first case towards the end of January 2020.
 - Worldwide, there have been more than 89 lakh cases and more than 4.6 lakh deaths.
 - Some of the worst-affected countries are Brazil, the US, the UK, Spain and Italy.
 - There is not much known about the new coronavirus, which has been designated **2019-nCoV**.
 - It is considered a novel virus outbreak because the virus is novel (new – not seen earlier).
 - **Symptoms of the new virus include:**
 - Fever
 - Coughing
 - Muscle pain
 - Fatigue
 - Breathing difficulties
 - Can cause pneumonia (infection of one or both lungs)
 - Can be fatal
- After a slow onset in an infected body, the disease spreads rapidly in the second week.
- Hypoxemia caused due to intensifying lung injury leads to difficulty in breathing and the need for oxygen therapy.
- Another common complication observed is ARDS (acute respiratory distress syndrome).
- Other complications include acute kidney injury, septic shock and virus-induced cardiac injury.
- The incubation period for the virus ranges from 2 to 14 days.

- The incubation period is the time starting from exposure to the virus to developing symptoms.
- During the incubation period, the Wuhan virus is contagious.
- The **virus is believed to have originated** in a seafood market in Wuhan that was involved in the illegal sale of wildlife.
- Many early patients of the virus had some link to the market, suggesting an **animal-to-human spread**.
- A further rise in the number of patients (who have not had exposure to the market) suggests that person-to-person spread is happening. However, at present, it is not clear as to how this spreading occurs between people.

COVID 19 – Indian Context

The national lockdown of 21 days, announced on 24th March 2020 by PM Narendra Modi has been extended till 3rd May 2020. The announcement of the lockdown extension in India has been made on 14th April 2020 by the PM. The developments regarding the Coronavirus and the pandemic in India are listed below:

- The first case of the Novel Coronavirus in India was confirmed in Kerala; the patient is a female student at Wuhan University, on 30th January 2020. She had traveled back to her home town.
- Two more cases were confirmed from the same state of Kerala.
- The Kerala state government has declared a '**state calamity**'.
- On March 3rd, 2020, two new cases were detected in Delhi and Telangana. Both patients are said to be stable.
- As of March 5th, 2020, with more than 23 confirmed cases in the country, the total number of infections in India has gone up to 29, out of which 14 are tourists from Italy.
- The Union Health Minister has told the Parliament that 28,529 people are being monitored.
- As of 17th March, about 130 people in India have been infected with the coronavirus, and three deaths have been reported from Karnataka, Delhi and Maharashtra.
- On 19th March, the total number of cases of persons infected with COVID-19 rose to 170 including the three deaths.
- On 20th March, the number of cases in the country surpasses 200.
- As on 23rd March, the total number of cases in India rose to 415. The number of fatalities is 7 till date.
- On 24th March, Prime Minister Modi announced a nationwide lockdown for 21 days in a bid to curb the rapid spread of the virus.
- As on 26th March, the number of cases has risen to 649 with the death toll rising to 13.
- On 2nd April, the death toll stands at 50, with 1965 infections in total (including 151 cured/discharged/migrated).
- On 8th April, the number of cases in India topped 5000 and more than 150 fatalities.
- On 16th April, the number of cases have crossed 12000 and the total number of deaths crossed 400.
- On 27 April, the number of cases have almost touched 28000 and 872 people have died due to the coronavirus.
- As of 28th May, the number of affected people in the country touched 1,58,000. Total number of deaths is 4531. More than 67000 people have recovered from the virus.

- Maharashtra is the worst-affected state with more than 52000 confirmed cases, followed by Tamil Nadu, Gujarat and Delhi.
- By mid-June, the total number of cases in India is more than 4 lakhs, with more than 13500 fatalities. More than 2 lakh people have also recovered from the coronavirus.

The government authorities have taken many measures to prevent the further spread of the virus.

- Travel advisories are being revised as and when new updates are being confirmed about the coronavirus.
- Anyone with a travel history to China since 15th January could be kept in quarantine.
- The government has also issued a **travel warning to China** and urged people to refrain from visiting the country.
- E-Visa facilities have been blocked for the time being for Chinese nationals. E-Visa already issued will also be invalid.
- Further, the online facility for submitting an application for a physical visa from China is also suspended.
- Chinese nationals who have a compelling reason to visit India are being asked to contact the Indian consulate at Shanghai or Guangzhou, or the embassy in Beijing.
- The Ministry of Civil Aviation has issued instructions to all national and international airlines to comply with the above advisory for their operations from China.
- The Indian government has evacuated its nationals (around 650 in number) from Wuhan in two batches. Air India flights fetched the Indian nationals who were stranded in Wuhan, along with 7 Maldivian nationals as well.
 - Most of the Indians were students who were pursuing studies in China.
 - The rescued people were subject to quarantine on arrival for medical examinations.
- The government has also evacuated its citizens from many other countries where the virus has caused a lot of damage, like Italy, Iran, etc. More than 2000 citizens have been evacuated from different countries including China.
- Airports are screening passengers in 21 airports, international seaports and border crossings, especially with Nepal.
- All flights from Thailand, Singapore, China, Hong Kong, Japan, Nepal, Indonesia, Malaysia and Vietnam were being screened.
- Currently, universal screening at all international airports and sea-ports are being conducted using thermal imagery equipment. The passengers will also have to mandatorily fill forms of places visited by them abroad.
- Additionally, 28,529 people in various Indian states and UTs are under community surveillance.
- In airports, dedicated aerobridges are already in place for flights from China, South Korea, Japan, Italy, Iran, Singapore, Thailand, Hong Kong, Vietnam, Nepal and Indonesia. Now, with the rising number of cases in the USA, Spain and France, India has decided to have separate aerobridges for flights from these 3 countries also.
- To meet the rising demands of health workers in airports, more doctors, paramedics and nurses have been deployed.

Latest Travel Advisory Update by the GOI: No scheduled international commercial spacecraft will be allowed to land in India from 22nd March 2020.

- The government also extended the visa of foreigners stranded in India till April 15.
- As the number of cases rise in the country, many districts have announced complete lockdowns. Interstate travel is restricted, and the government is constantly advising people to remain indoors and avoid unnecessary travel.
- **All train services including suburban rail services are suspended till 31st March. Interstate passenger transport is suspended.**
- All metro rail services have been suspended till 31st March 2020. State Governments have issued orders allowing only essential services to operate in about 75 districts with confirmed cases.
- The government has asked private firms to mandate work from home for all employees.
- Only essential services (medical stores, vegetables, milk, groceries, etc.) to remain open in many parts of the country.
- The **operations of domestic schedule commercial airlines shall cease operations** with effective from the mid night 23.59 IST hours on 24th March.
- **The government has divided the districts of the country into three, to manage the situation:**
 - **Hotspot districts,**
 - **Non-Hotspot districts with reported cases, and**
 - **Green zone districts.**
- The government is carrying out a phased lifting of lockdown in order to mitigate the effects of the spread, and also to resume partial economic activity.
- On May 4th, the lockdown was extended till the 17th of the month with eased restrictions in districts depending upon the areas's category.
- The government has also decided to repatriate stranded Indians from the Maldives and Singapore.
- The government has announced a special financial package on 12 May, worth Rs. 20 Lakh Crores for helping the economy revive.

To know more about the government's COVID-19 relief packages Pradhan Mantri Garib Kalyan Yojana and the Atmanirbhar Bharat Scheme, click on the linked articles in the table at the end of this page.

Latest Development on the Wuhan Coronavirus

India reported its first case of the Wuhan Coronavirus on 30th Jan 2020. The patient is a female student of Wuhan University from Kerala. She had returned from China and was diagnosed in Kerala. She has been kept in isolation and her condition is said to be stable.

Two more cases have been confirmed from Kerala as of February 2020. The patients have been kept in isolation in the hospital and their conditions are said to be stable.

About 4000 patients have also recovered from the disease in China.

The Novel Coronavirus has now officially been named **COVID-19** by the WHO. "co" stands for "corona", "vi" for "virus" and "d" for "disease", while "19" stands for the year when the outbreak was first identified (on December 31, 2019).

On March 12, 2020, the first COVID-related death in India was reported from Bangalore, when a 76-year old man died, having tested positive for COVID-19.

Wuhan Coronavirus Outbreak Timeline

A timeline of the Wuhan virus outbreak is outlined below:

Dec 31, 2019: China alerts the World Health Organisation (WHO) to several cases of pneumonia.

Jan 1, 2020: The seafood market in Wuhan is shut down.

Jan 5, 2020: Chinese officials rule out the possibility of the SARS virus.

Jan 7, 2020: The new virus named 2019-nCoV is identified.

Jan 11, 2020: First death is announced by China.

Jan 13, 2020: The first case outside China is reported by the WHO, in Thailand.

Jan 23, 2020: The City of Wuhan is placed under quarantine. Air and rail traffic are suspended.

Jan 25, 2020: Travel restrictions imposed in another five cities in the Hubei Province.

Jan 30, 2020: First case detected in India, in the southern state of Kerala. Also, the virus outbreak declared a Public Health Emergency of International Concern by the WHO.

Feb 1, 2020: WHO declares the outbreak a global emergency. Read more on this at [CNA dated Feb 1, 2020](#).

Feb 11, 2020: The death toll in mainland China crosses the one thousand mark.

Feb 12, 2020: The virus has officially been named **COVID-19** by the WHO.

Mar 03, 2020: New new cases detected in Delhi and Telangana.

Mar 05, 2020: 23 new confirmed cases in India, 14 of them being tourists from Italy.

Mar 08, 2020: The number of confirmed cases in India rises to 39.

Mar 11, 2020: The WHO declared the outbreak as a 'pandemic'.

Mar 12, 2020: The number of cases in India goes up to 60. The first death in India reported from Bangalore.

Mar 13, 2020: The number of cases in India is up to 75.

Mar 16, 2020: The number of cases in India goes up to 116. Uttarakhand reports its first case of COVID-19.

Mar 20, 2020: Total number of cases in India rises to 223. Four deaths so far.

Mar 23, 2020: Total confirmed cases 415; death toll 8.

Mar 24, 2020: All domestic commercial airline operations will cease from the midnight of 24th March. Cargo carrying flights are exempted. Nationwide lockdown begins from midnight.

Mar 26, 2020: The total death toll in India from COVID-19 rises to 13; number of cases 649.

Mar 30, 2020: Death tally in India crosses the 30 mark. Number of infections has risen to 1190. Worldwide, more than 7 lakh people have been affected by the virus.

Apr 2, 2020: Death toll in India reaches 50. The total number of infections rise to 1965 and this includes 151 cured/discharged/migrated cases.

Apr 6, 2020: The number of deaths in India crosses the 100 mark. Total infections rise to more than 4000. The worst-affected states are Kerala and Maharashtra. PM Modi indicates there might be a phased opening of the lockdown.

Apr 9, 2020: Total number of cases at 5865 and the number of fatalities stands at 169.

Apr 16, 2020: India's total cases is 12380 (including 10477 active cases +1489 cured/discharged/migrated). Total deaths is now 414.

Apr 21, 2020: Total number of cases in India rise to 17,265. There has been a total of 543 deaths. There have been no cases reported in the last 14 days from 23 states and 59 districts. There are also no active cases reported from the state of Goa.

Apr 27, 2020: The number of cases in India is now 27,892, with 872 fatalities. More than 6000 people have recovered from COVID-19.

May 7, 2020: The total number of people who have been infected is almost 53000. Total deaths is over 1700.

May 12, 2020: The government announced a special financial package for a self-reliant India. Read more on the package on our CNA dated 13 May 2020.

May 13, 2020: The total number of COVID-19 infected persons in the country has risen to 75000. The death toll is now 2293. More than 22000 people have been treated and discharged so far.

May 28, 2020: The total number of COVID-19 affected people in India is more than 1.5 lakhs. There have been more than 4000 deaths also.

June 22, 2020: The total number of affected people in the country rise to 4.25 lakhs with more than 13500 deaths.

What is Coronavirus?

Coronaviruses are a large family of viruses that are common in various species of animals, such as cattle, camels, bats, and cats. They cause diseases ranging from cold to SARS.

- In some cases, animal coronaviruses can infect humans, which can then spread from person to person.
- This happened in the case of the **SARS and MERS coronaviruses**. It is also suggested that this might be happening in the current China virus case.

- Coronaviruses cause respiratory infections in humans which are generally mild, but sometimes, can be fatal.
- Coronaviruses are physically large as far as viruses go (26 – 32 kilobases), having a surface of spike projections (which resembles a crown and hence the name 'corona').
- Like the influenza virus, the coronavirus spreads through both direct and indirect contact.
 - Direct contact happens through a physical transfer of the microorganism through close contact with oral secretions.
 - Indirect contact happens when a person infected with the virus sneezes or coughs, which spreads the virus droplets on surfaces.
- Person-to-person spread occurred with MERS and SARS mainly via respiratory droplets produced when an infected person coughs or sneezes, quite like how influenza and other respiratory pathogens spread.

Human Coronaviruses

There are **seven strains of human coronaviruses**. They are:

1. Human coronavirus 229E (HCoV-229E)
2. Human coronavirus OC43 (HCoV-OC43)
3. SARS-CoV
4. Human coronavirus NL63 (HCoV-NL63, New Haven coronavirus)
5. Human coronavirus HKU1
6. Middle East respiratory syndrome coronavirus (MERS-CoV)
7. Novel coronavirus (2019-nCoV) – Wuhan pneumonia or Wuhan coronavirus, COVID-19

Coronaviruses are known to cause a significant percentage of all common colds in human beings (adults and children).

Given below is a comparison of three coronaviruses that hit the headlines:

Coronavirus name	COVID-19	SARS	MERS
Full form	Novel coronavirus	Severe acute respiratory syndrome	Middle East respiratory syndrome
Country of origin	China	China	Saudi Arabia

Primary host	Probably bats (unconfirmed)	Bats	Bats
Intermediate host	Not identified	Masked Palm Civets	Camels

For more information on the latest available scientific data on the COVID-19 virus, refer to our [PIB dated 1st April, 2020](#).

Zoonotic Diseases

Diseases that pass from animals to humans are called zoonotic diseases. They are rare. The chief concern with them is that since they are new to humans, the human body does not have any immunity to them.

Zoonotic diseases are also called zoonoses. They are caused by harmful germs such as bacteria, viruses, fungi and parasites.

How Zoonotic Diseases spread?

- Direct contact: with saliva, urine, and other bodily fluids, by touching or petting animals.
- Indirect contact: coming into contact with areas where animals live, or with objects and surfaces that have been contaminated with germs.
- Vector-borne: being bitten by insects like mosquitoes, fleas or ticks.
- Foodborne: eating contaminated food.

More on [Zoonotic Diseases](#).

Measures taken to combat the Wuhan Coronavirus

There are no specific treatments for human coronaviruses. 2019-nCoV does not have a vaccine or any effective treatment. One method of fighting the spread of the disease is to take preventive measures.

The following is the advisory issued by the Government of India:

✔ Do's	✘ Don'ts
<ul style="list-style-type: none">• Observe good personal hygiene• Practice frequent hand washing with soap• Follow basic respiratory etiquette - cover your mouth while sneezing and coughing• Wash your hands with soap and running water (when hands are visibly dirty)• Clean your hands with alcohol-based hand rub or soap and water (when your hands are not visibly dirty)• Throw used tissues into closed bins immediately after use• See a doctor if you feel unwell - while visiting a doctor wear a mask/cloth to cover your mouth and nose• If you have any symptoms, please call State Helpline Number or Health Ministry 24*7 helpline number +91-11-23978046 or email at ncov2019@gmail.com	<ul style="list-style-type: none">• Have a close contact with anyone, if you're experiencing cough and fever• Spit in public• Contact with live animals or consumption of raw/undercooked meat• Travel to farms, live animal markets or where animals are slaughtered

- The WHO recommends people to do regular handwashing, cover mouth and nose while coughing or sneezing, and avoid close contact with anyone suspected of being infected or showing respiratory illness symptoms.
- In China, authorities are taking measures to curb the spread of the virus and prevent a SARS-like situation. SARS, which originated in China, spread to more than 35 countries and killed almost 800 people.
- People in public places are asked to wear face masks.
- Schools and universities have extended their winter breaks in view of the epidemic-like situation in Wuhan.
- Hong Kong and Macau have declared emergencies.
- All passengers travelling from China are being checked at airports.
- Travel within China is also highly restricted with private vehicles being banned in Wuhan.

Kickstart your **UPSC 2020** Preparation today!

UPSC Questions related to Wuhan Coronavirus

What is Wuhan coronavirus?

It is a new strain of coronavirus that is similar to the SARS and MERS viruses. It originated in China. It causes respiratory illness and can even cause death.

How do you get the coronavirus?

Coronaviruses spread from animals to humans in some cases, which can then be transmitted from person to person. Like the influenza virus, the coronavirus spreads through both direct and indirect contact.

Is there a cure for coronavirus?

There is currently no vaccine for the virus. The best preventive remedy is to avoid being exposed to the virus. As of now, there is no confirmed specific anti-viral treatment recommended. Doctors from a hospital in Thailand declared they had a breakthrough in the treatment of the virus by using HIV and flu drugs.

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